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NOTICE OF ALLOWANCE AND FEE(S) DUE

23446   7590   12/08/2008

MCANDREWS HELD & MALLOY, LTD
500 WEST MADISON STREET
SUITE 3400
CHICAGO, IL 60661

EXAMINER
BAUTISTA, XIOMARA L

ART UNIT	PAPER NUMBER
2179	

DATE MAILED: 12/08/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,194	07/18/2003	Alexander G. MacInnis	17414US03	4045

TITLE OF INVENTION: GRAPHICS DISPLAY SYSTEM WITH GRAPHICS WINDOW CONTROL MECHANISM

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	$1510	$0	$1510	$1510	03/09/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED.   THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT.   SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED.   THIS STATUTORY PERIOD CANNOT BE EXTENDED.   SEE 35 U.S.C. 151.   THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION.   IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **Mail** Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
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or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

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500 WEST MADISON STREET
SUITE 3400
CHICAGO, IL 60661

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

_____ (Depositor's name)

_____ (Signature)

_____ (Date)

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nonprovisional	NO	$1510	$0	$1510	$1510	03/09/2009

EXAMINER	ART UNIT	CLASS-SUBCLASS
BAUTISTA, XIOMARA L	2179	715-768000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,

(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 _____

2 _____

3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE   (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

☐ Issue Fee

☐ Publication Fee (No small entity discount permitted)

☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

☐ A check is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.   ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____   Date _____

Typed or printed name _____   Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 993 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 993 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

	Application No.	Applicant(s)
Notice of Allowability	10/622,194	MACINNIS ET AL.
	Examiner	Art Unit
	X. L. Bautista	2179

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to <u>documents filed 11/18/2008</u>.

2. ☒ The allowed claim(s) is/are <u>1-20</u>.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

        a) ☐ All   b) ☐ Some*   c) ☐ None   of the:

               1. ☐ Certified copies of the priority documents have been received.

               2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

               3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

      * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3. ☒ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date <u>11/18/2008</u>

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☐ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

/X. L. Bautista/
Primary Examiner, Art Unit 2179

DETAILED ACTION

Reasons for Allowance

1.   Claims 1-20 are allowed.

2.   The following is an examiner's statement of reasons for allowance: Prior art of record fails to teach a system and method having a window controller that obtains description data from windows displaying graphics images; wherein the system and method sorts the data describing the windows based on the windows respective depths; transmits header packets, from the window controller to a display engine, having data describing the windows; transfers the graphics images to the display engine in response to the header packets; and blends the graphics images using alpha values associated with the graphics images.

Cottle (US 6,263,396 B1) discloses a method and system that has an interrupt controller to generate an interrupt; the interrupts are processed by an interrupt handler for a processor in order of priority. Cottle teaches overlapped windows having positions and dimensions that are given by their attributes. Cottle teaches a display controller that accesses a display memory to read pixel data, detect transitions between pixels, and control the data processing. Cottle explains that the memory contains a description of the active window displaying a picture, and the description is done pixel by pixel. The window controller selects attributes of the windows in real-time during display; the controller contains the position of each window to be displayed on the current screen, compares the position of the windows and indicates each window transition and the

window number. Cottle teaches that graphics may be blended and that window

blending is determined by a blend factor. Cottle teaches a Transport Packet Parser

(TPP) that processes a header of each packet and decides whether the packet should

be discarded, further processed, or stored without intervention from software but it does

not teach or suggest transmitting header packets from the window controller to a display

engine; the header packet containing data describing the windows, transferring the

graphics images in response to the header packets and blending the graphics images

using alpha values associated with the graphics images.

   Dye (US 6,108,014) discloses a system and method having a graphics controller

that maintains pointers to various areas in the system memory having video or graphics

display information; and that manipulates respective object information workspace

memory areas that correspond to each object or window, wherein the workspace areas

specify data types, color depths, 3D depth values, alpha blending information, screen

position for the respective window or object on the screen. Dye teaches a Window

Assembler that maintains respective object information areas located in system memory

for each window or object on the display screen. The object information areas include a

window workspace area and a Windows ID list area. The areas of system memory are

mapped as object information memory or windows workspace memory; wherein each

window workspace contains important information pertaining to the respective window,

including the position of the window on the display, the number of bits per pixel or color

composition matrix, depth and alpha blending values, and respective address pointers

for each function. The Window Assembler uses the information of each respective window workspace during screen refresh to draw the respective window information on the display screen. Dye does not teach or suggest transmitting header packets from the Window Assembler to a display engine; the header packet containing data describing the windows, transferring the graphics images in response to the header packets and blending the graphics images using alpha values associated with the graphics images.

   Dye (US 5,706,478) discloses a system and method having a processor for executing display list packets in processor and coprocessor modes. Dye teaches a graphics processor that executes display list packets associated with real-time graphics functions loaded into a private memory. The display list packet format allows dynamic allocation to switch between processor and coprocessor modes and facilitates concurrent execution. Dye teaches that the application program and software driver build the display list packets and that either the CPU or a direct memory access (DMA) device transfers selected ones of the display list packets to the graphics subsystem. Dye explains that the graphics subsystem includes a memory attached to the host interface bus further coupled to the graphics processor, so that parallel or concurrent execution is facilitated. Dye teaches that the use of display list command packets provide 3D animation capabilities and that the display list commands include a set of drawing instructions for lines, triangles, polygons, etc. and include a set of initial and slope parameters for drawing the particular graphics element. The structure of each display list packet allows address independence. A list of commands is provided

sequentially, where each command includes a parameter field identifying the number of parameters associated with and immediately following the command in the instruction stream. The graphics processor can determine the location or position of the next command in the instruction stream, thereby eliminating the need for providing separate addresses per command. Dye explains that the graphics processor provides high level graphic capability including 3D animation, and that building the display list packets provides complete control over graphics functions. Dye does not teach or suggest transmitting header packets from a Window Controller to a display engine; the header packet containing data describing the windows, transferring graphics images from memory to the display engine in response to the header packets and blending the graphics images using alpha values associated with the graphics images.

Conclusion

3.   Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to X. L. Bautista whose telephone number is (571) 272-4132. The examiner can normally be reached on Monday-Thursday 8:00AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Weilun Lo can be reached on (571) 272-4847. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

5.   Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/X. L. Bautista/
Primary Examiner, Art Unit 2179

December 02, 2008